On the occurrence of a Lessepsian migrant teleost off the Algerian coast (southwestern Mediterranean): The bluespotted cornetfish, *Fistularia commersonii* (Fistularidae)

by

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RÉSUMÉ. - Présence d'un téléostéen immigrant lessepsien devant la côte algérienne (Méditerranée sud-occidentale) : le poisson cornette à taches bleues, *Fistularia commersonii* (Fistularidae).

Un poisson cornette à taches bleues, *Fistularia commersonii* Rüppell, 1835, a été capturé près d'Alger, dans la région centrale de la côte algérienne, au sud-ouest de la Méditerranée. Le spécimen était une femelle mesurant 853 mm de longueur totale, en incluant le filament, et pesait 380 g. *Fistularia commersonii* est le premier téléostéen immigrant lessepsien identifié dans les eaux algériennes. Cette capture montre une extension occidentale de la distribution de cette espèce à partir du bassin levantin oriental depuis son premier signalement méditerranéen, en 2000. La présence de l'espèce devant la côte algérienne et l'actuelle répartition de l'espèce en mer Méditerranée sont commentées et discutées.

Key words. - Fistularidae - *Fistularia commersonii* - MED - Algerian coast - Extension range - Record.

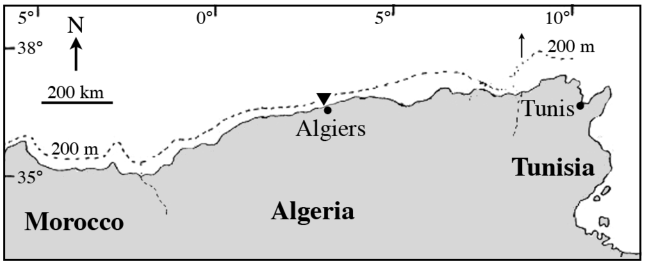

Figure 1. - Capture site (triangle) of the specimen of *Fistularia commersonii*. *[Site de capture (triangle) du spécimen de* F. commersonii.*]*

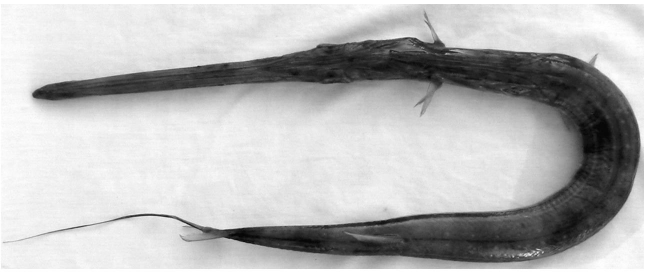

Figure 2. - Specimen of *Fistularia commersonii* (Rüppell, 1835).

Investigations conducted during the past decade off the Algerian coast allowed to report records of invasive fish species, all originating from the eastern tropical Atlantic, into the Mediterranean through the Strait of Gibraltar. These records concerned both elasmobranchs and teleosts (Hemida *et al*., 2002, 2005). By contrast, no Lessepsian migrant species was recorded in the area; to the opposite such species were mainly recorded off the neighbouring Tunisian coast (Bradaï *et al*., 2004). Observations carried out in fishing sites located along the Algerian coast permit us to collect a bluespotted cornet fish, *Fistularia commersonii* Rüppell, 1835, the first invasive teleost species from Indo-Pacific collected off the Algerian coast. *Fistularia commersonii* was previously reported in different Mediterranean areas, eastern such as off the Mediterranean coast of Israel (Golani, 2000), the Aegean Sea (Karachle *et al*., 2004), and off Libya (Shakman and Kinzelbach, 2007), central such as off Tunisia (Ben Souissi *et al*., 2004), off the Island of Lampedusa (Azzurro *et al*., 2004), and to date one record was reported in the western area, off Sardinia, by Pais *et al*. (2007). In this note, we present a description of the Algerian specimen and we comment the occurrence of the species in the area and in the Mediterranean.

DESCRIPTION OF THE ALGERIAN SPECIMEN

On 5th January 2008, at 20 km west of Algiers (Fig. 1), a specimen of *Fistularia commersonii* was caught by demersal gill-net, on sandy-muddy bottom, 300 m off shore (depth of 10-15 m approximately), in the central region of the Algerian coast (36°48'0947 N, 2°53'4334 E). The specimen was photographed and immediately frozen at -10°C, and referenced as catalogue number FSB/HAL/0108, in the Ichthylogical Collection of the University of Algiers, Faculté des sciences biologiques. Measurements were carried out to the nearest millimetre, and weight to the nearest 0.1 gram.

Identification was made from skin entirely smooth with lack of both bony plates along midline of back and of spines in ossifications of the posterior lateral line, and on the occurrence of strongly serrate ridges on both edges of snout. Body extremely depressed with a narrow tubular snout. Dorsal and anal fins similar and triangular, opposing each other just in correspondence of the tail. Caudal fin forked, with two very elongated and filamented middle rays. Colour brownish to olive-green with blue spot on back. Belly beige, fins rather translucent and transparent at base, with orange cast. Measurements and counts are presented in table I.

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Table I. - Measurements and counts carried out on the specimen of *Fistularia commersonii. [Mesures et comptes réalisés sur le spécimen.]*

Weight (in g.)	380
Morphometry (in mm)	
Total length without filament	762
Total length including filament	853
Standard length	752
Pre-dorsal fin length	616
Pre-pectoral fin length	275
Pre-anal fin length	616
Snout length	190
Longitudinal ocular diameter	19
Vertical ocular diameter	8
Dorsal fin length	31
Pectoral fin length	25
Anal fin length	31
Body height	16
Counts	
Dorsal soft fin rays	13
Pectoral soft fin rays	14
Anal soft fin rays	11
Caudal soft fin rays	20

DISCUSSION

Description, measurements and counts are in agreement with previous reports of the species (Golani *et al*., 2002; Azzurro *et al*., 2004; Pais *et al*., 2007). Additionally, information provided by fishermen revealed that several other specimens were caught off Algiers and the neighbouring areas, unfortunately no specimen was available for confirmation. However, *Fistularia commersonii* should be included in the Algerian ichthyofauna and the capture constitutes the westernmost range expansion of the species in the Mediterranean.

This record is in agreement with Azzurro *et al*. (2004), who pointed out the Mediterranean extension of Lessepsian fishes. Karachle *et al*. (2004) considered *F. commersonii* as a 'Lessepsian sprinter', with special regard to the fast rate expansion of the species in the Mediterranean, compared with other Lessepsian migrant fishes in same regions. It confirms the Golani's opinion (1998), stating that once a Lessepsian migrant fish species arrived in the Mediterranean and established a self-sustaining population, there are no physical barriers preventing its dispersion westward. This is the case for *F. commersonii,* and Golani *et al*. (2002) noted that first record is immediately followed by additional records. *Fistularia commersonii* is one of the seven species which had reached the western Mediterranean basin to date, such as *Abudefduf vaigiensis*, *Pomadasys stridens*, *Scomberomorus commerson*, *Siganus luridus*, *Stephanolepis diaspros* and *Upeneus mori* (Golani *et al*., 2002). It could be considered as the most successful Lessepsian teleost migrant. Food and feeding habits of *F. commersonii*, *pro parte* explained its rapid westward expansion in the Mediterranean. Summarizing previous studies, Psomadakis *et al*. (2008) noted that the species is an active and opportunist feeder, which feeds on both bottom-swelling and pelagic teleosts and develops different hunting strategies. Additionally, Psomadakis *et al*. (2008) noted that 'the invader has demonstrated great capacity to adapt to local hydro-climatic conditions' and cited several unpublished records throughout Sardinian coast. Similar patterns could explain the rapid extension of the bluespotted cornetfish off the Algerian coast; since the first finding on 5 January 2008, information provided by fishermen showed that new captures of *Fistularia commersonii* occurred in Algerian western areas, during April-May 2008, close to the Moroccan border.

Karachle *et al*. (2004) noted that the species is at present abundantly caught in certain Mediterranean areas, and added that a probable colonization of the species in the areas where it was discovered, implies important effects on the local communities. This hypothesis requires further confirmation.

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